

[0013] Another objective is to clearly show that the front surface area of a slice is a fraction of the outer surface area of the cylinder and that the fraction is determined by  $\theta/360$ .

## Claims

[c1]

I claim:

1. A device consisting of a hollow outer half-cylinder, and an inner half-cylinder that can rotate around a common center for both the inner and outer half-cylinders, wherein a top surface of the hollow outer half-cylinder and a top surface of the inner half cylinder can be rotated to form a circle's circumference, with individual slices that can be attached to the inner half cylinder making a complete 360-degrees cylinder, the hollow outer half-cylinder having marked off units around the 180 degrees of the hollow outer half-cylinder.

[c2]

2. Cancelled

[c3]

3. A device of claim 1, wherein the hollow outer half-cylinder show the equations for the circle's circumference and area, the arc length and sector area, the outer surface area of the cylinder and identifies the radius.

[c4]

4. A device of claim 1, wherein the inner half-cylinder has marked off units around the 180 degrees of the inner half-cylinder.

[c5]

5. A device of claim 1, wherein the inner half-cylinder show the equations for the volume of the cylinder and of a slice, the front surface area of the slice, and the side surface area of the slice and identifies the radius and height.

[c6]

6. A device of claim 1, wherein the Individual slices show the equations for the volume of the respective slice, the front surface area of the slice, the side